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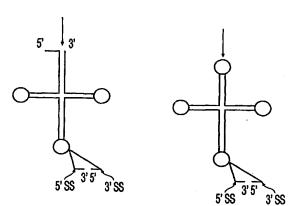
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(54) Title: TARGETING ENZYMES OF THE tRNA SPLICING PATHWAY FOR IDENTIFICATION OF ANTI-FUNGAL AND/OR ANTI-PROLIFERATIVE MOLECULES

### HTS Fluorescent Screening



(57) Abstract: The present invention relates to a method for screening and identifying compounds that modulate the activity of one or more components in the tRNA splicing pathway. In particular the invention relates to a method for screening and identifying compounds that modulate the activity tRNA splicing endonuclease and/or tRNA splicing ligase. The invention provides assays for the identification of compounds that inhibit animalia tRNA splicing endonuclease and/or animalia tRNA splicing ligase. The invention also provides assays for the identification of compounds that inhibit fungal tRNA splicing endonuclease and/or fungal tRNA splicing ligase. The methods of the present invention provide a simple, sensitive assay for high-throughput screening of libraries of compounds to identify pharmaceutical leads useful for treating and/or preventing cancer and/or fungal infections.

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